

REMARKS

The Office Action of January 30, 2009 presents the examination of claims 1-4, 12-14, 18-24, 28, 34-36 and 46-48, the remaining being withdrawn pursuant to a Restriction Requirement.

Withdrawn claims to virus embodiments, *i.e.* claims 5-11, 15-17, 25-27, 29-33 falling within the generic claim 1, but nonetheless deemed to be at least one separate invention from the remaining claims presently pending, are canceled. Withdrawn claims to polynucleotide embodiments, *i.e.* claims 49-63, are also canceled.

Withdrawn claims directed to methods of use of the compositions of the invention, are maintained pending and are amended to remain commensurate in scope with the pending claim 1.

Claim 1 (and claim 64) is amended to incorporate the features of prior claim 14, which is accordingly canceled.

Applicants reserve the right to file an application pursuant to 35 USC § 120 directed to subject matter canceled from the present application.

Priority claim

The specification is amended by this paper to recite the claim to priority in the manner requested by the Examiner.

Rejections based on prior art

Claims 1, 2, 4, 14, 18, 19, 22-24, 34-36 and 46-48 stand rejected under 35 USC § 103(a) as being unpatentable over Clarke '520 in view of Collins (PNAS vol. 92) and Murphy '326, and further in view of Wertz '229. This rejection is traversed. Reconsideration and withdrawal thereof are respectfully requested.

Applicants submit that the Examiner fails to establish *prima facie* obviousness of the present invention. In particular, the combination of the references cited fails to disclose or suggest at least one feature recited in the claims, and the combination of references also fails to

provide the artisan of ordinary skill in the art at the time the invention was made any reasonable expectation of success in making the claimed invention.

The present claim 1 (and commensurate method claim 64) describes an infectious RSV comprising a chimeric genome or antigenome that is further modified to include at least one amino acid replacement mutation from among a list of four particular sites or a single nucleotide replacement at a particular site. All of the listed mutations provide an attenuation phenotype. (See, *e.g.* Table 39 at pp. 149 – these are the 248, 404, 1009 and 1030 mutations - and data in Table 41 at p. 163.)

Clarke '520 does not provide any description of the particular changes in amino acid sequence that are recited in the present claim 1. Murphy '326 describes the particular mutant strains of RSV that are the source of the mutations listed in claim 1. However, Murphy '326 also does not disclose the nucleotide or amino acid sequence of any of the mutant viruses, and also does not provide any description of the particular changes in amino acid sequence that are recited in the present claim 1. Neither do Collins (PNAS vol. 92) or Wertz '229 supply this information. Thus, the combined references cited by the Examiner do not disclose or suggest the present invention and so the instant rejection fails and must be withdrawn.

The Examiner's reliance upon *KSR* is not persuasive; the "finite number of potential predictable solutions" is unacceptably large in the present instance, and there are in fact no "known" solutions within the cited references that may be "obvious to try".

Again, the instant rejection should be withdrawn.

Claim 20 is rejected under 35 USC § 103(a) over the collection of Clarke, Collins, Murphy and Wertz as above, and further in view of Connors (1995) and Randolph '222. This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

This rejection fails for the same reason as above. Connors and Randolph do not remedy the failure of the collection of Clarke, Collins, Murphy and Wertz to describe the particular point mutations recited in claim 1 and so at least this element of the claims remains undisclosed and unsuggested by the combined references. Accordingly, this rejection should be withdrawn.

Obviousness-type double patenting

Claims 1, 4, 14, 18-20, 22-24, 28, 35 and 46-48 are rejected under the doctrine of obviousness-type double patenting over claims 1-4, 12, 14, 18, 20-25, 28 and 31-34 of US 6689367. A Terminal Disclaimer sufficient to overcome this rejection is provided with this paper, thus obviating this rejection.

Applicants submit that the presently claimed invention is free of the prior art of record and so the present application is in condition for allowance. Such favorable action is respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell, Ph.D., Reg. No. 36,623, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 
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